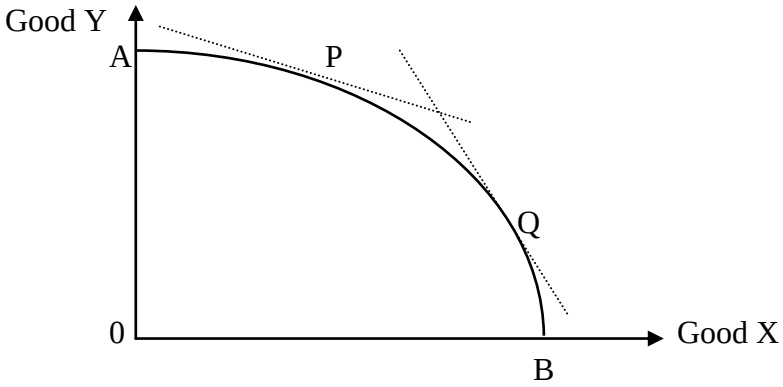
SHAPE OF PRODUCTION POSSIBILITY CURVE:

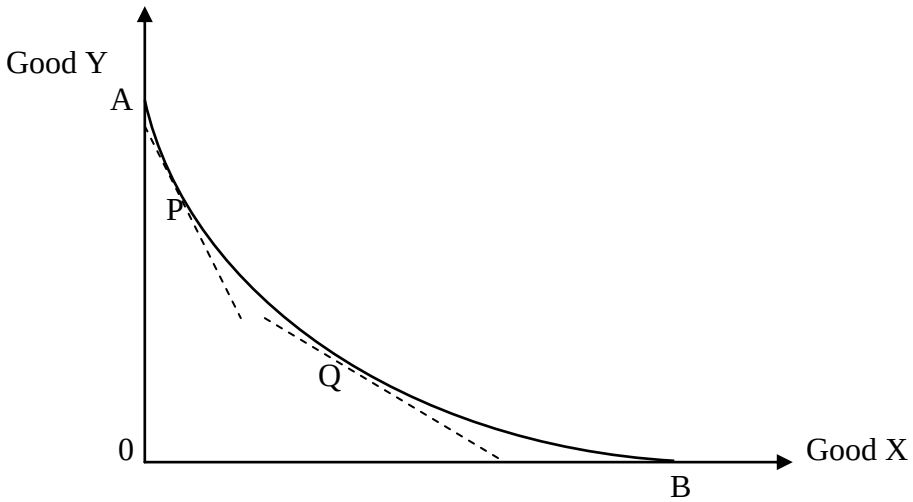
Shape 1: ***Concave***



The slope of the production possibility curve is the Marginal Rate of Transformation (MRT) which indicates the rate at which one good is being transformed into another, not physically, but by transferring resources from one good to another good. As we move along the production possibility curve through points P and Q downwards, slope or steepness of each tangent through these points increases. Thus, the production possibility curve takes a concave shape, indicating increasing opportunity cost, that is, the economy is willing to give up more Y for an additional unit of X. There is increasing opportunity cost because of diminishing returns.

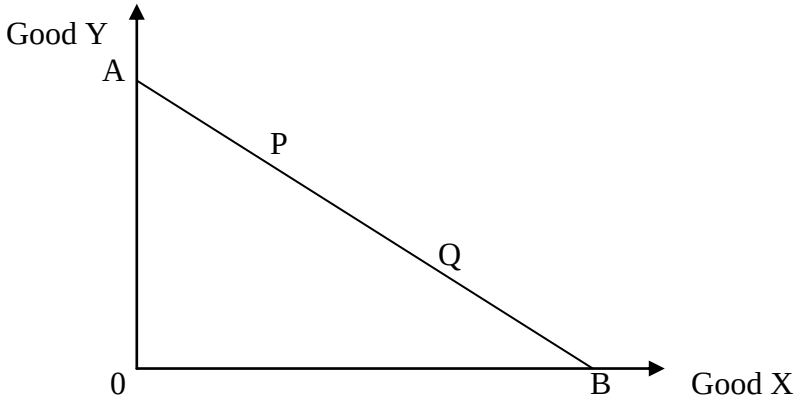
Note: slope of PPC = MRT_{YX} = change in Y / change in X = opportunity cost of producing an additional unit of X in terms of Y.

Shape 2: ***Convex***



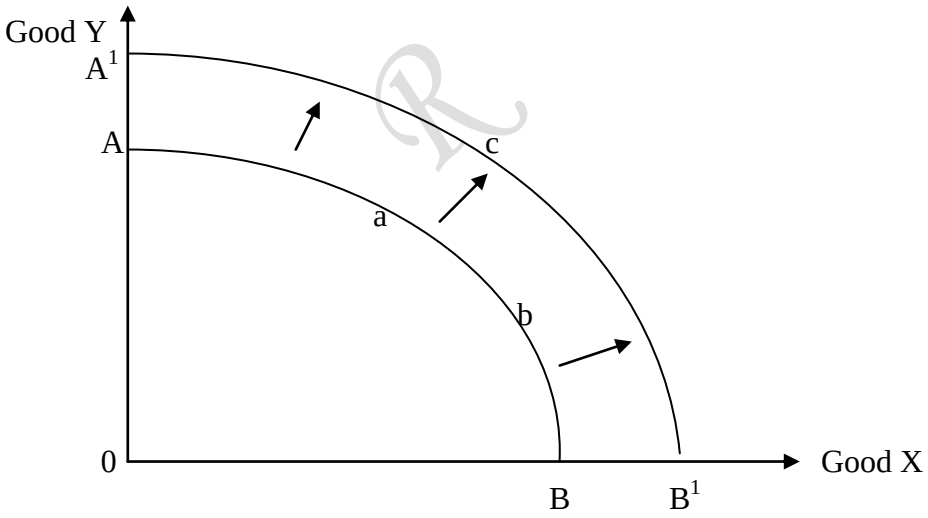
As we move downwards from P to Q, the steepness of each gradient falls, i.e, the gradient becomes flatter. In other words, the slope of the production possibility curve diminishes as we move downwards. This means that the MRT_{YX} keeps falling, and thus, the opportunity cost is decreasing (increasing returns). The economy is now willing to give up less units of Y for the same additional unit of X.

Shape 3: *Linear*



Here the slope of the production possibility curve remains constant. The MRT_{YX} is constant or unchanged as we moved downwards the curve from left to right. Thus, the production possibility curve becomes linear or straight line. The opportunity cost also remains constant (constant returns). This means that the economy is willing to give up the same amount of Y for the same additional unit of X.

SHIFT OF THE PRODUCTION POSSIBILITY CURVE:



If the economy's capacity to produce goods is increasing, the production possibility curve will be moving outwards over time. This indicates that economic growth has taken place. Economic growth shifts the boundary outward and makes it possible to produce more of all goods. Before growth points a and b were on the production possibility curve and point c was unattainable. After growth, point c is attainable.

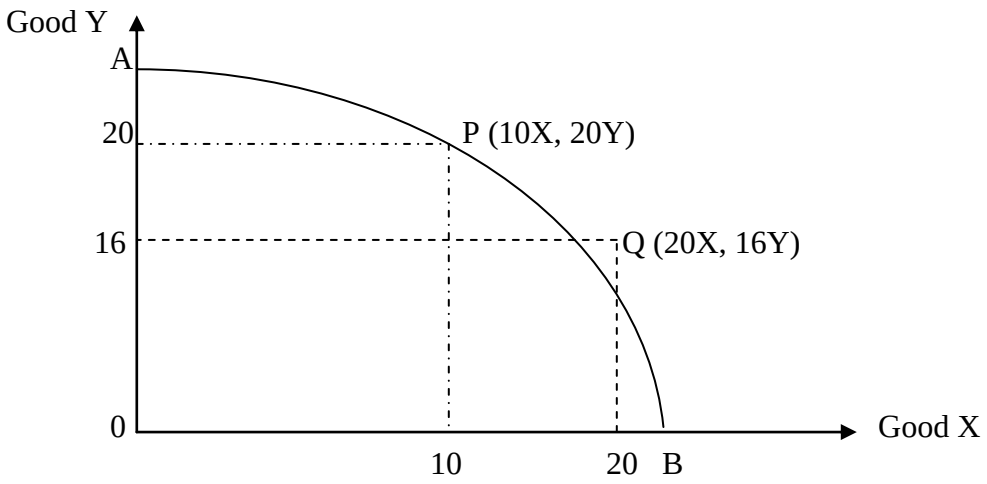
FACTORS RESPONSIBLE FOR THE SHIFT:

1. Improvement in the state of technology
2. Increase in the labour force and labour productivity

3. Increase in capital stock (investment)

4. Discovery of new resources.

PRODUCTION POSSIBILITY CURVE AND EXCHANGE (through international trade):



In an open economy, suppose a country produces at point P along the production possibility curve AB. In other words, with the available amount of resources, it produces 10 units of X and 20 units of Y. Combination Q cannot be produced due to scarcity of resources unless there is economic growth. However, even without economic growth, consumption at point Q could be attained only through exchange, that is, only if the country engages itself in international trade. To attain combination Q, the country has to export 4Y and import 10X.

ECONOMIC SYSTEMS:

The central problem of every economic society is to allocate resources in deciding what, how, and for whom to produce. These three questions are dealt with in different ways in each and every

economy. They are dealt with depending on the economic and political frameworks of that country. Broadly speaking, the economic systems are classified into 3 categories namely:

1. The market economy or laissez-faire system or capitalist economy.
2. The command or planned economy
3. The mixed economy.

MARKET ECONOMY:

In a market economy resource allocation is carried out by private individuals only. All factors of production are privately owned and managed. There is no government intervention and everyone is free to operate according to his will and desire. The main characteristics of such a system are:

1. Price/ market mechanism which manipulates the allocation of resources or tries to resolve the three fundamental questions of what, how and for whom to produce. In other words, resources are allocated through changes in relative prices. Adam Smith referred to it as the "invisible hands" of the market.

2. Consumer's sovereignty exists, that is, consumer is a king because it directs the allocation of resources to a large extent while satisfying its own needs. His basic aim is to maximise satisfaction. The consumer's decision can dictate economic actions as what and how to produce.

3. Producers aim at profit maximisation and rely on higher prices as a "green signal" to higher production. The foundation is the profit motive. Evidently, the production of those commodities will be more profitable which are demanded more by consumers.

4. Fierce competition among firms exists and basically it is this competition which encourages technological change, innovation and higher investment.

5. Easy mobilization of capital due to profit maximisation and regular innovations. Obviously, these do encourage industrialization and economic development.

ADVANTAGES OF MARKET ECONOMY:

1. There is consumer sovereignty. This means that consumers can influence what goods are produced directly by their purchase. In fact, they are free to buy whatever goods and services from

which they can derive maximum satisfaction. Similarly, the greater use of price mechanism will provide an automatic and quick way to signal to producers what consumers want.

2. The market provides a wide variety of goods and services to meet consumer's wants. Indeed, the consumers may have a greater choice of a number of private-sector producers. This increased competition may increase the quality of products since rival producers will seek to attract new customers by improving the standard of their goods.

3. The market system provides incentives to producers in the form of profits and workers in the form of higher wages. This should encourage entrepreneurs to produce high quality products and to innovate, and workers to work hard.

4. There is greater efficiency. The aim of firms in a market economy is to make maximum profit. Hence, the market system encourages technological change, that is, the use of new and better methods and machines to produce goods and services at low cost. Those firms, which do not produce what people want at low cost and low prices, may go out of business.

MARKET FAILURES / IMPERFECTIONS:

In theory the price mechanism can go a long way in efficiently and automatically solving the basic economic problems. However, in practice it fails in many respects. There are many market failures such that the price system cannot ensure the best use of scarce resources:

1. No provision for public goods or public utilities:

Public goods are goods produced on a non-profit maximisation basis because they (street-lighting, defence, roads) aim at maximising socio-economic welfare. Thus, they cannot be produced through the market. There is no possibility of fixing a price for the product in question and hence no possibility of making a profit.

2. Divergence between social cost and private cost:

Private cost refers to the cost which is incurred in the production of a certain commodity, for example, labour cost or cost of raw materials. However, when production process takes place, there are smokes which come from factory chimneys, and garbage or wastes thrown in rivers, thereby, creating

pollution. Economists evaluate these costs and name them as external costs or negative externalities. These external costs are never considered by a private producer in a market economy. This means that nothing much is done to reduce pollution and any other destruction caused to nature.

3. Harmful products may be produced and consumed:

The absence of a government sector implies the absence of taxes and the free operation of the market mechanism. Left to the price system, there will be overproduction of certain harmful products such as drugs, alcoholic drinks and cigarettes. Their high prices initiate higher production and greater infiltration of these harmful goods which greatly affect the peaceful life.

4. Luxuries in place of necessities:

Since allocation of resources depends greatly on those goods whose prices are high or are rising, obviously, the private producers will produce more of these goods and less of other goods may be essential products. Thus, a rise in the demand of cars may encourage producers to produce more cars and less food which is but an irrational allocation of resources. The system broadly indicates that only the rich people have the greater say through their expenditure patterns and the poor, on the hand, remain poor.

5. Unequal wealth distribution / inequalities of income:

Indeed, the laissez-faire capitalism makes the rich richer and the poor poorer. Systematic exploitation by the capitalists of the poor working class is obvious because they have to maximise returns and minimise costs, essentially labour costs. The labour cost has to operate at low rates and be very productive in the production process. In this case, the wealth distribution under this system can never be reduced.

6. Persuasive advertising:

Owing to the fierce competition which exists among firms in a pure market system, huge expenses are made annually on advertising. The advertising which is adopted is meant for product differentiation. Such expenses are usually against customers' interests because they are not only

misleading, but also wasteful. Resources used in advertising could have been used somewhere else for more productive purposes.

7. Cyclical fluctuations:

Cyclical fluctuations are caused by the ever-changing demand and supply conditions. Sometimes, when producers anticipate a rise in demand for certain goods, they raise investment to produce more. But if demand actually does not rise, a general glut will occur, that is, stock accumulation. Consequently, the affected producers will have to reduce investment, dismiss workers to reduce costs. Both of these have an adverse effect in the economy as a whole. Less investment means lower production while lower employment means less consumption, lower prices and profits. These cumulative effects lead to a lower national income.

It can be deduced that price mechanism determines allocation of resources as per what consumers want more which initially sounds right. However, this system cannot be left to itself because of its various imperfections which undoubtedly necessitate government intervention.

PLANNED ECONOMY:

A planned economy is the direct opposite of the market economy. Here all the resources are owned by the government or the public sector which is the central body deciding upon the allocation of resources. This allocation is however exerted on the following grounds:

- Maximising socio-economic welfare through creation of public utilities.
- Non-profit maximising strategy.
- Parliamentary decisions.

However, in real world, command economies seldom exist. Central planners may set the prices of essential consumer goods, and allow factory managers to set prices of less essential goods. However, such an economic system has got several demerits which can be discussed as follows:

1. Decisions are based on a parliamentary level:

Since decisions are based on parliamentary level, they are not readily implemented and in this way, several important decisions concerning socio-economic activities may be delayed.

2. Inefficiency:

A common feature against the public sector is inefficiency and lack of competence. The sector is generally over-staffed and inefficient. The services are of "Red-Tape" type because of high level of bureaucracy. In addition, the attitude of a secured job in the government sector makes workers idle and careless about the quality of services to be provided to the members of the public.

3. Waste of resources:

Very often there is wastage of resources especially when public sector expenditure is analysed. There is a great abuse on the part of the workers concerning the use of public sector resources and materials.

4. The absence of competition:

The absence of competition in this economic system does not ensure innovation and constant improvements in the quality and quantity of products. Owing to the principle of "No profit- No loss", huge losses have to be borne at times by the public sector. Therefore, it is difficult to find out additional resources for innovations.

5. Restriction on consumers' sovereignty:

Since there is central allocation of resources, consumers may demand what they wish but to a restricted extent. The production of luxuries is given as the ultimate priority by the government because of the concept of the welfare state. Priority must be given only to the production of the most essential products in the society.

MIXED ECONOMY:

In a mixed economic system, resource allocation is influenced both by the private and public sectors. In other words, in such an economic system, some economic decisions are taken by the market mechanism and some by the government planning. It has been found that all modern economies are now, to varying extent, mixed in nature. Many nations have fluttered from socialism in the course of time so much so that they have embraced the term mixed economy. Recent developments have

suggested the superiority of market over planned economies. For instance, the collapse of communism in Russia and Eastern Europe in late 1980s had proved the demise of planning due to ineffective resources allocation. On the other hand, predominantly capitalist nations such as USA allowed government to take some economic decisions. Thus, in a mixed economy the price system allocates resources, but on account of market failures, there is the need for government intervention. In fact, the government has to intervene in order to attain some important micro and macro economic objectives.

Role of government planning in a mixed economy:

1. In a modern mixed economy, the government has to intervene to change the wrong combination of goods. If left to the price system, there will be over-production and over-consumption of demerit goods like drugs, cigarettes and alcohol. Hence, the government has to discourage consumption of these demerit goods through taxation.

2. The government has to provide public goods in a modern mixed economy since provisions of these goods are difficult and unsuitable in the hands of private sectors. Defence, roads, street-lightning are provided by the state in every modern mixed economy. Market system cannot compel payment for public goods since there is no way to prevent a person who refuses to pay for the good from receiving its services. Thus, the private firms will fail to produce these goods. The government, by virtue of their power to tax, can provide the services and collect from everyone.

3. In a view to maximising profits, private firms consider only their private costs and private benefits. They ignore any external costs and benefits incurred in the production process. Thus, firms tend to produce more of those goods which cause external costs (pollution), but less of those goods which cause external benefits. As a result, the government intervention is deemed necessary to correct the externality by making rules and regulations. The government should subsidise activities which cause external benefits, while impose taxation to reduce external costs.

4. Most government in modern mixed economy have policies designed to discourage firms to act as monopoly. In many countries, important legislations are passed to regulate existing monopolies and prevent informal agreements with the main aim of making profits by exploiting consumers.

5. Government may aim to promote the general economic welfare of the population by creating a more equitable distribution of income and wealth. They may aim to achieve this by a system of progressive taxation, subsidies and transfer payments.

6. Governments have a large number of macro-economic policy instruments which they use to influence, for example, the level of spending, the amount of investment, level of employment, rate of inflation and international trade position. Their aim is to ensure a steady rise in output and improvements in living standards.

ROLE OF PRIVATE SECTOR IN A MIXED ECONOMY:

1. Greater competition in the private sector motivates innovations and improvements in the quality of goods and services provided by the public sector.

2. Profits may be used as a guide to efficient allocation and this tends to raise competition and encourage industrialisation.

POSITIVE AND NORMATIVE STATEMENTS:

It is important to distinguish in the study of economics two types of statements representing the methodology or approach in the scheme of analysis. These statements are positive and normative.

Positive statements deal with facts which had already been experienced. In addition, they are concerned about what is, was or will be. The evolution of life and the society is dynamic and several experiences are encountered and it is "positive statements" which would analyse these experiences.

On the other hand, normative statements depend on our value judgements, i.e, what is good or bad and how things should be. What we want to happen and what really happens are two different issues. What we want to happen is normative and what really happens is positive.

For example, "what policies will reduce unemployment?" and "what policies will prevent inflation?" are positive ones, while the question "Ought we to be more concerned about unemployment than about inflation?" is a normative one.

The statement "A more equal distribution of income would increase national welfare" is a normative statement, while "An increase in government spending will reduce unemployment and increase inflation" is a positive one.

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FUNCTIONS OF MONEY:

Money must perform the following functions to overcome the problems with barter.

1. Money must act as a medium of exchange. This means that money allows buying and selling to run efficiently. An individual can sell his labour service and uses the money to buy other wants.

2. Money acts as a measure of value. This means that the value of all goods and services are expressed in terms of money. Consumers are able to compare the value of different goods. Similarly, businessmen keep record of their transactions in forms of money.

3. Money must act as a store of value. This means that members of the public can hold their wealth in terms of money. An individual can save his money in the bank and use it in the future to buy goods and services.

4. Money must act as a standard of deferred payment. This means that credit transactions and hire purchase can take place. People can acquire goods and services now and payment can be made later.

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SPECIALIZATION / DIVISION OF LABOUR:

Specialization means concentration of factors of production in one particular task in which they are best suited. A community which practise specialization is able to produce more than enough goods than they need. The increased production achieved by specialization is the result of the division of labour. Division of labour means that each worker concentrates on one job he is best able to do and relies on the work of others to supply most of his needs. In other words, with division of labour people need to exchange or trade in order to obtain a variety of goods and services to satisfy their wants.

Division of labour also means the splitting or the breaking up of the whole production process into several processes where each process is performed by one worker or a group of workers who become specialist. Division of labour can also be among nations which means that countries, or areas within countries, specialize in certain kinds of products (comparative advantage).

ADVANTAGES OF DIVISION OF LABOUR:

1. More goods and services can be produced:

When workers become specialists in the job they do, repetition of the same operation increases the skill and speed of the worker. As a result, more is produced. Division of labour enables mass production to take place.

2. Maximum use of the worker's ability:

With the division of labour there is greater chance that people will be able to do those things at which they are best and which interest them the most. Hence, there is improvement in skills.

3. Time is saved:

Time is saved because workers do not have to move from one operation to another. Time is also saved when training people. A worker can be trained very quickly for the performance of a single operation.

4. It allows the use of machinery:

As labour is divided up into specialist tasks, it becomes worthwhile to use machinery which allows a further saving in time and effort. In fact, division of labour enables the use of more simple machines.

DISADVANTAGES OF DIVISION OF LABOUR:

1. Work may become boring:

A worker who performs the same operation each and every day is likely to become very bored and dissatisfied. This may lead to increased absenteeism and reduced productivity.

2. Lost of craftsmanship: When industry applies division of labour, there is a loss in craftsmanship. Division of labour has led to an increase use of machinery. Thus, the basic skills have now been transferred from the hands of the workers to machines. It is the machines which now control the design and quality of the goods.

3. Workers become too dependent upon each other:

Specialization and division of labour means that people come to rely on others for the provision of goods and services. This illustrates that in many industries, workers have become dependent on the actions of other workers. For instance, if there are several processes in the production of an article, a strike among one group of workers can quickly affect those engaged in other processes.

4. Limited knowledge:

Division of labour has caused workers to have limited knowledge. The workers only get to know one job. They do not have the wide training which would make them adaptable to changes in the techniques of production. Thus, should there be a decline in the demand for their particular skills, the workers find it difficult to transfer to other occupations. These workers will, therefore, be unemployed.

5. Products are all the same:

The goods produced under a system of specialization are usually turned out in vast numbers and share the same design. In other words, they are standardized. It is not possible to please everyone because it would be difficult and expensive to change the production process to suit one person's wishes.